Participant Questionnaire

Participant number: #1	Date: 6/28/23
Location: Brescia, IT	
HRC Study / Algorithms tested: HA HAMP-S, STAP-PPF	HAMP-P
Study Conducted by: <u>Jared</u> Flowers	- The same of the

Participant link lengths/dimensions: (meters, "spine" is pelvis to shoulder midpoint, "shoulders" is shoulder to shoulder)

Spine	
Neck	
Shoulders	0.36

Left Upper Arm	0.3	
Left Forearm	0.25	

Right Upper Arm	0.3	
Right Forearm	0.25	

Participant joint diameter: (meters)

Left Elbow	0,08
Left Wrist	0.06

Right Elbow	0.08
Right Wrist	6.06

Questions:

- A. How safe did you feel? (0 is not safe at all, 5 is neutral, 10 is very safe)
- B. Do you think the robot hindered your motions during the task? (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)
- C. Did the robot perform logical motions? (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)
- D. What is your overall satisfaction with the HRC task? (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

For Task 1 (engine parts): (circle your answer to each question)

Task 1, Me	thod 1:									- 1	
Question /	A: (0 is not	safe at all, 5	is neutra	l, 10 is very	safe)						
0	1	2	3	4	5	6	7	8	9	(10)	
Question I	Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	(e)	10	
Question	C: (0 is robo	ot motions i	made no s	ense to you	, 5 is neutr	al, 10 is rob	ot motions	made sens	se to you)		
0	1	2	3	4 `	5	£6)	D	8	9	10	
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	<u>(4)</u>	5	6	7	8	9	10	

Task 1, Me	ethod 2:		1						100	
Question	A: (0 is not	safe at all, 5	is neutra	, 10 is very	safe)					000
0	1	2	3	4	5	6	7	8	9	(10)
Question	B: (0 is rob	ot complete	ly prevent	ed your mo	otions, 5 is n	eutral, 10 is	robot did	not impede	you moti	on)
0	1	2	3	4	5	6	7	8	9	(10)
Question	C: (0 is rob	ot motions	made no s	ense to you	u, 5 is neutra	l, 10 is robo	t motions	made sense	e to you)	
0	1	2	3	4	5	A SERVICE OF THE PROPERTY OF T	(7)	8	9	10
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)									
0	1	2	3	4	(5)	6	7	8	9	10

Task 1, Me	ethod 3:					6				
Question	A: (0 is not	safe at all, 5	is neutra	, 10 is very	safe)				444	
0	1	2	3	4	5	6	7	8	9	10
Question	B: (0 is rob	ot complete	ly prevent	ed your mo	tions, 5 is r	neutral, 10 is	robot did	not imped	e you motio	n)
0	1	2	3	4	5	6	7	8	(9)	10
Question	C: (0 is rob	ot motions r	nade no se	ense to you	, 5 is neutr	al, 10 is robo	t motions	made sens	e to you)	
0	1	2	3	4	5	<u>6</u>	7	8	9	10
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)									
0	1	2	(3)	4	5	6	7	8	9	10

Some cell phone use, performed tasks quickly, sometimes started tasks slighty ahead/behind instruction

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For Task 2 (Sharework parts: metal tabs, cylinders, pallets): (circle your answer to each question)

Task 2, Me	ethod 1:									
Question	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)	- 20				
0	1	2	3	4	5	6	7	8	9	10
Question	Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)									
0	1	2	3	4	5	6	7	(8)	9	10
Question	C: (0 is robo	ot motions	made no se	ense to you	, 5 is neutra	al, 10 is rob	ot motions	made sense	e to you)	
0	1	2	3	4	5	6	(7)	8	9	10
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)									
0	1	2	(3)	4	5	6	7	8	9	10

Task 2, M	ethod 2:				,						
Question	A: (0 is not	safe at all,	5 is neutra	, 10 is very	safe)			a			
0	1	2	3	4	5	6	7	8	9	(10)	
Question	Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)										
0	1	2	3	4	5	6	7	8	9	(10)	
Question	C: (0 is rob	ot motions	made no s	ense to you	ı, 5 is neutra	al, 10 is rob	ot motions	made sense	e to you)	$\overline{}$	
0	1	2	3	4	5	6	7	(8)	9	10	
Question [Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)										
0	1	2	3	4	5	(6)	7	8	9	10	

Task 2, Mo	ethod 3:									
Question	A: (0 is not	safe at all,	5 is neutral	, 10 is very	safe)		The second secon			
0	1	2	3	4	5	6	7	8	9	10
Question	B: (0 is rob	ot complete	ely prevent	ed your mo	tions, 5 is r	neutral, 10 i	s robot did	not impede	e you moti	on)
0	1	2	3	4	5	6	7	8	9	(10)
Question	C: (0 is rob	ot motions	made no se	ense to you	, 5 is neutr	al, 10 is rob	ot motions	made sens	e to you)	
0	1	2	3	4	5	6	7	(8)	9	10
Question D	Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)									
0	1	2	(<u>)</u>	4	5	6	7	8	9	10

Comments:

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